

CLAIMS

I claim:

1. A laser level with adjustable laser projection line, comprising:

a housing

a support bracket positioned within the housing;

a laser generator connected to the support bracket;

a power supply;

a switch for connecting the power supply to the laser generator;

wherein said laser generator projects a laser beam forwardly to form a line on a surface to be illuminated, the laser generator being rotably coupled to the support bracket such that in a first position the line is projected vertically on the surface and in a second position the line is projected horizontally on the surface.

2. The laser level with adjustable laser projection line of claim 1, further including a

protective door connected to the switch and which is capable of being moved from a first open position to a second closed position, wherein when the protective door is in the first open position the switch connects the power supply to the laser generator and when the door is in the second closed position the switch disconnects the power supply from the laser generator.

3. The laser level with adjustable laser projection line of claim 1, wherein said rotating mechanism further comprises a knob and two magnetic members and corresponding two fastening members which can be caught by the magnetic members.

4. The laser level with adjustable laser projection line of claim 1, wherein the support bracket has a base which includes a magnet.

5. The laser level with adjustable laser projection line of claim 4, wherein the base is coupled to a removable mounting baseplate, the baseplate comprising two pushpads each of which comprises at least one tractable pin, when said pushpads are depressed, said pins
5 protrude from the bottom of the baseplate.

6. A laser generating device comprising:

a housing having a base;

a laser generator disposed within the housing for projecting a laser beam through an
10 opening in the housing onto a workpiece; and

the laser generator coupled to a support bracket for rotating the projected laser beam from 0 degrees to 90 degrees with respect to the bottom of the housing.

7. The laser generating device of claim 6, wherein the rotating mechanism comprises a
15 knob which protrudes from the housing.

8. The laser generating device of claim 7, wherein the laser generator is connected to the knob and when the knob is turned clockwise to its limit, the laser beam projected by the laser generator will be one of either vertical or horizontal to the bottom of the housing, and when
20 the knob is turned counter-clockwise to its limit, the laser beam projected by the laser generator will be the other of either vertical or horizontal to the bottom of the housing.

9. The laser generating device of claim 8, wherein the laser generating unit is mounted on a bracket in the housing, the knob has first and second magnets attached thereto, and the
25 bracket has first and second positioning members, whereby when the knob is turned clockwise

to its limit the first magnet cooperates with the first positioning member to stabilize the position of the generated laser beam and when the knob is turned counter-clockwise to its limit the second magnet cooperates with the second positioning member to stabilize the position of the generated laser beam.

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10. The laser generating device of claim 6, wherein the base has a magnet for securing the laser level device to a metallic surface.

11. The laser generating device of claim 6, wherein the housing has a leveling bubble.

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12. A laser generating device comprising:

a housing having an opening at one end and a base;

a magnet disposed on the base of the housing;

a laser generator disposed within the housing for projecting a laser beam onto a

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workpiece;

a rotating mechanism coupled to the laser generator for rotating the projected laser beam from 0 degrees to 90 degrees with respect to the bottom of the housing.

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13. The laser generating device of claim 12 wherein a retractable cover is disposed over the opening and is moveable from a first open position to a second closed position, wherein when the protective door is in the first open position the switch connects the power supply to the laser generator and when the door is in the second closed position the switch disconnects the power supply from the laser generator.

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14. An assembly for generating a laser line, the assembly comprising:

a laser generating device comprising,

a housing having a base, the base including a magnet;

an opening formed in the housing;

5 a laser generator coupled to a support bracket within the housing for projecting

a laser beam through the opening in the housing;

a knob attached to the laser generator and extending outwardly from the

housing; and

a removable mounting baseplate having an attachment surface which cooperates with

10 the magnet to retain the laser generating device thereto.